ABSTRACT

A power factor improving circuit including: a boost reactor that inputs a rectified voltage obtained by rectifying an AC power supply voltage of an AC power supply by a rectifier circuit; a main switch that inputs the rectified voltage through the boost reactor and is turned on/off; a converting section that converts a voltage obtained when the main switch is turned on/off into a DC output voltage; and a control section that controls turn-on/off of the main switch to shape an AC power supply current to a sine wave form, controls an output voltage of the converting section to a predetermined voltage, and controls a switching frequency of the main switch according to a value of current flowing into the AC power supply, or that of current flowing into the rectifier, or that of current flowing into the main switch.